



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:13

Reporting for the week ending 03/30/19 (MMWR Week #13)

April 5, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

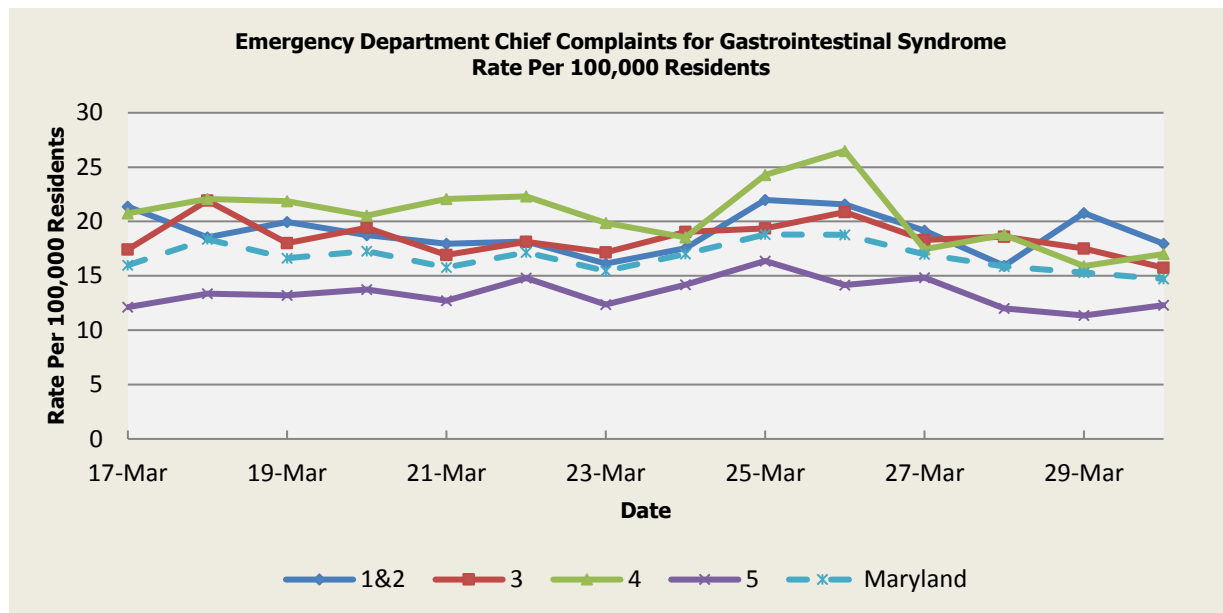
National:	No Active Alerts
Maryland:	Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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Gastrointestinal Syndrome



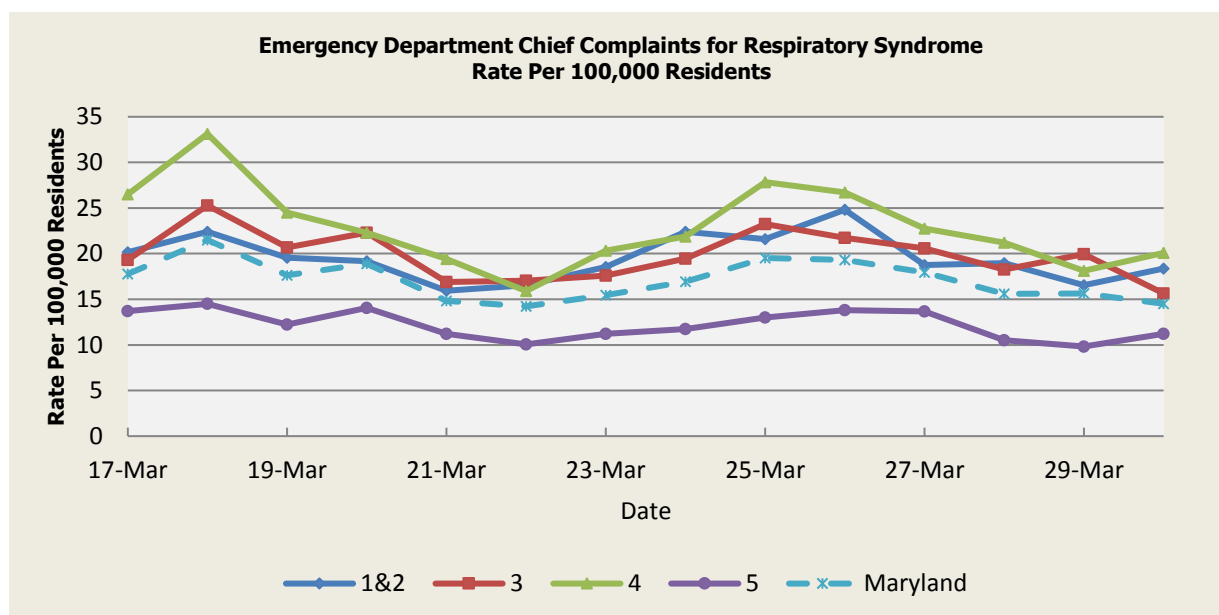
There were seven (7) Gastrointestinal Syndrome outbreaks reported this week: three (3) outbreaks of Gastroenteritis in Nursing Homes (Regions 3,5); one (1) outbreak of Gastroenteritis in an Assisted Living Facility (Region 3); one (1) outbreak of Gastroenteritis associated with a School (Region 4); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 5); one (1) outbreak of Gastroenteritis/Foodborne associated with an Office (Out of State).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.19	15.09	15.85	10.21	13.12
Median Rate*	13.11	14.87	15.46	10.08	12.97

** Per 100,000 Residents*

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Respiratory Syndrome



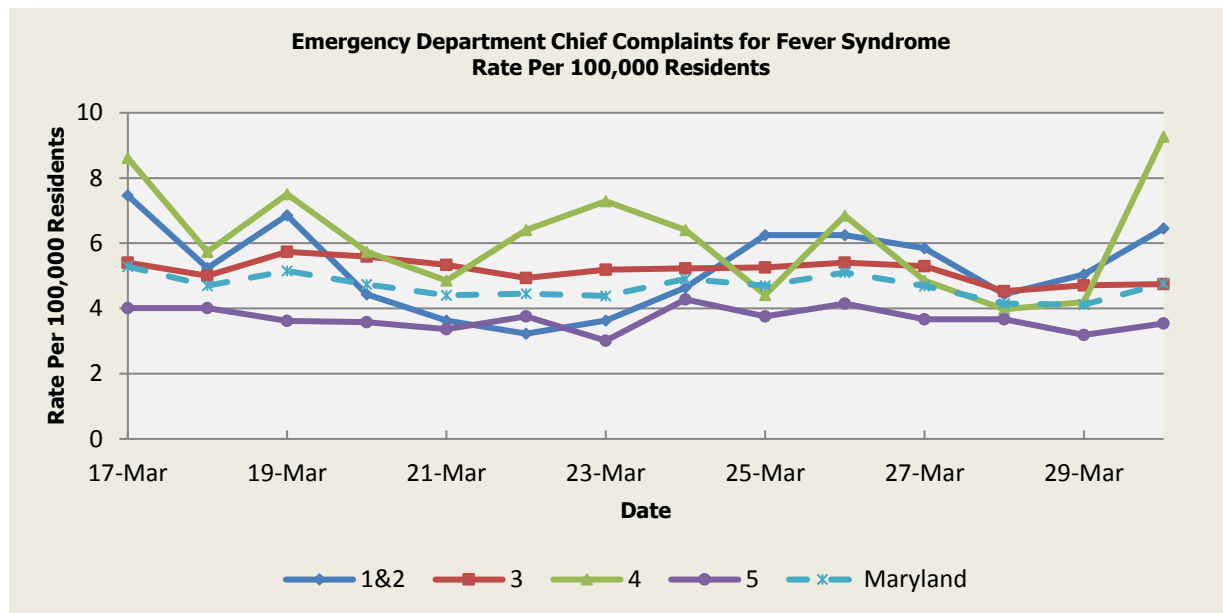
There were nine (9) Respiratory Syndrome outbreaks reported this week: seven (7) outbreaks of Influenza in Nursing Homes (Regions 3,5); one (1) outbreak of Influenza in a Hospital (Regions 1&2); one (1) outbreak of Influenza associated with a Daycare Center (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.63	14.72	15.06	9.98	12.75
Median Rate*	12.10	14.14	14.35	9.60	12.25

* Per 100,000 Residents

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Fever Syndrome



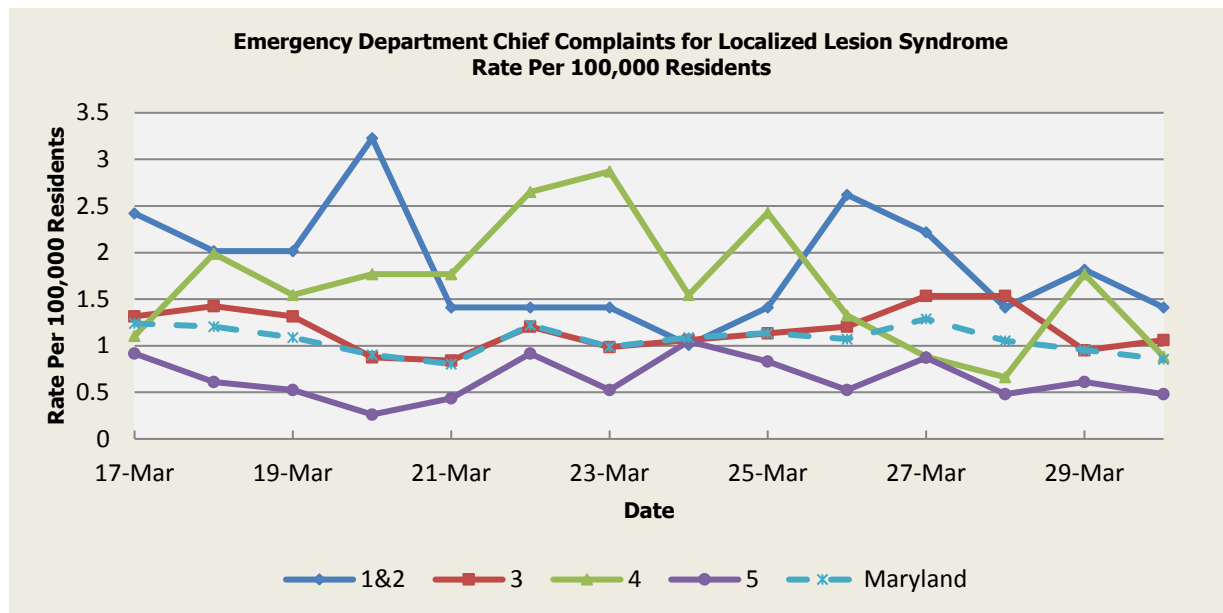
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.06	3.89	4.09	3.04	3.51
Median Rate*	3.02	3.76	3.97	2.92	3.38

**Per 100,000 Residents*

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Localized Lesion Syndrome



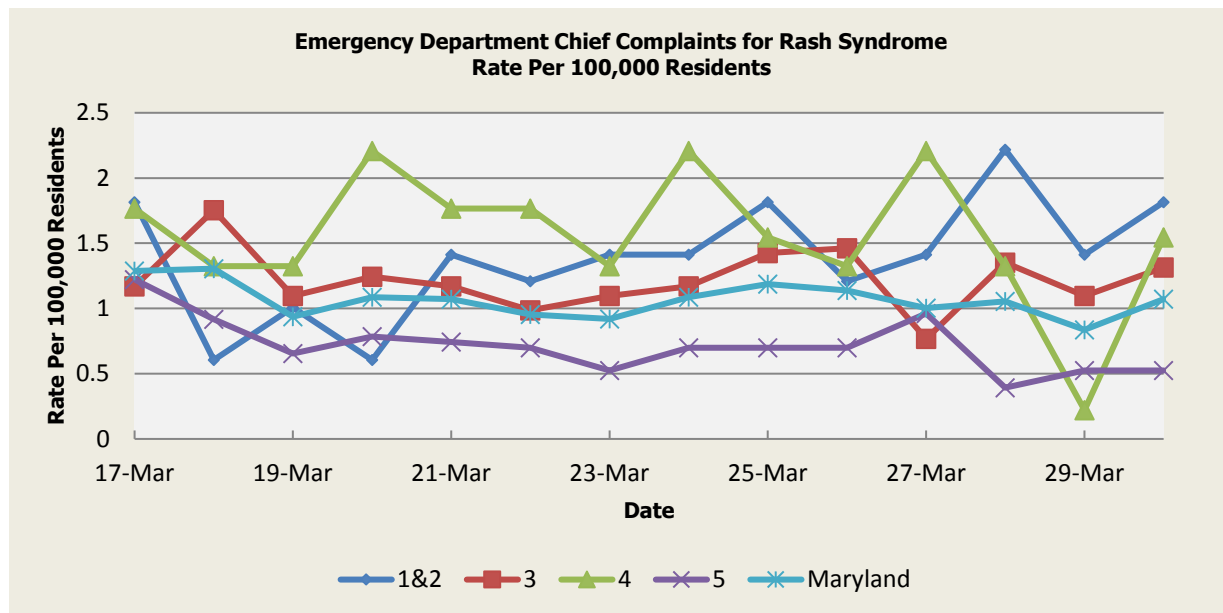
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.10	1.80	2.03	0.91	1.42
Median Rate*	1.01	1.75	1.99	0.87	1.37

* Per 100,000 Residents

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Rash Syndrome



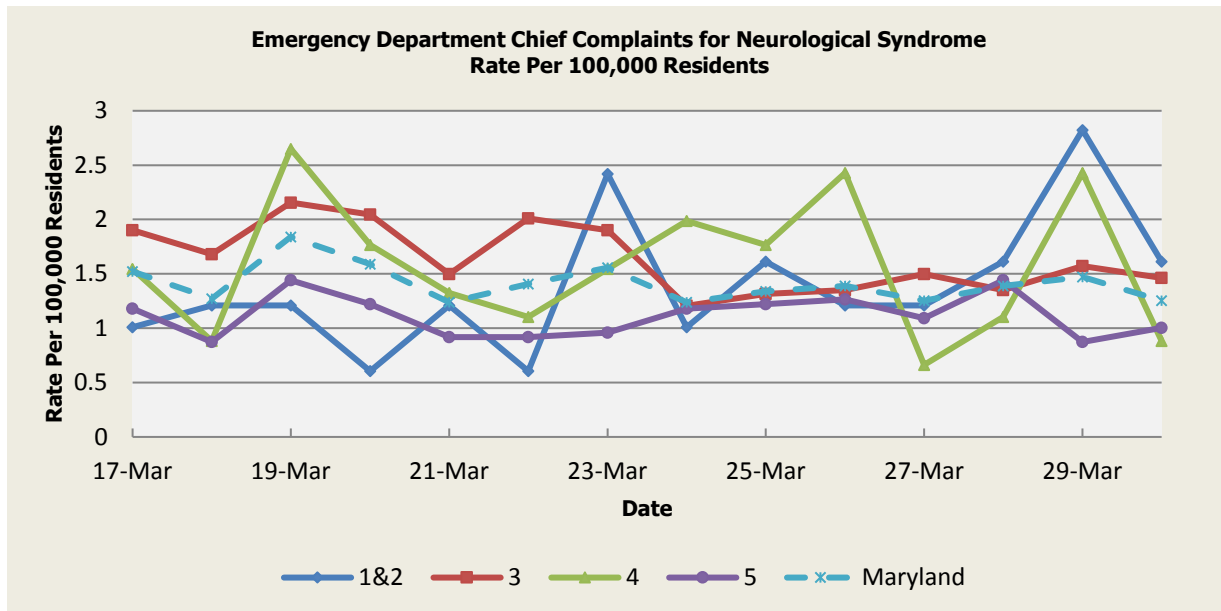
There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.68	1.76	0.98	1.38
Median Rate*	1.21	1.61	1.77	0.92	1.32

* Per 100,000 Residents

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Neurological Syndrome



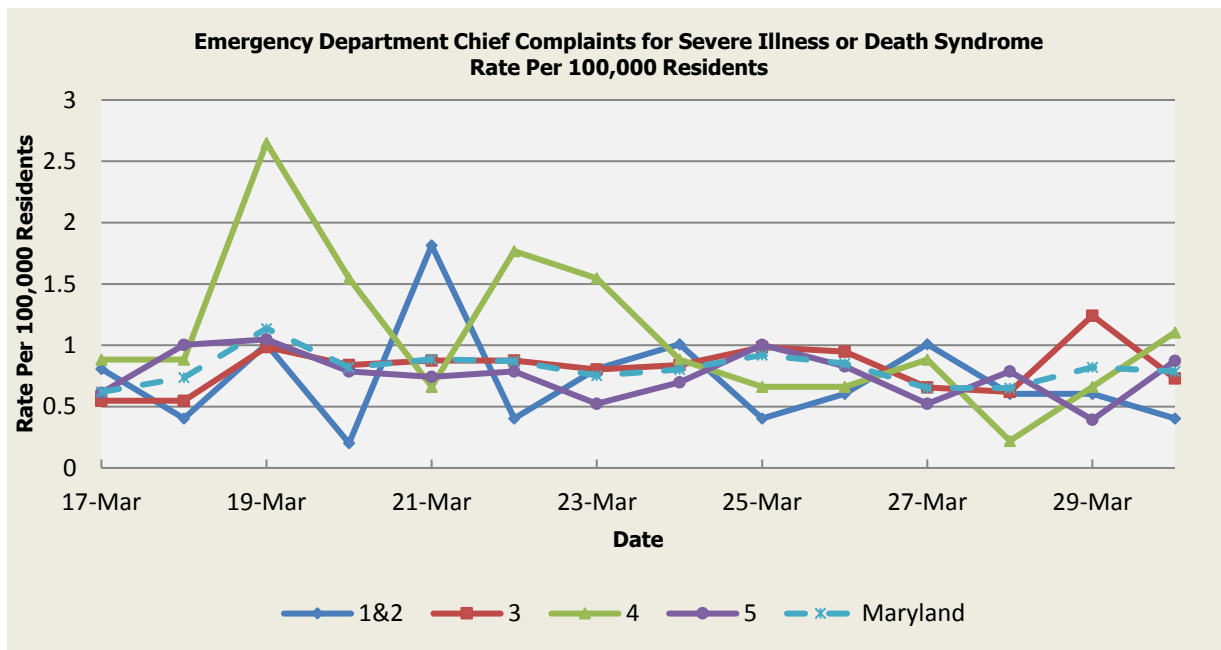
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.76	0.92	0.84	0.58	0.77
Median Rate*	0.60	0.80	0.66	0.52	0.69

* Per 100,000 Residents

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Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

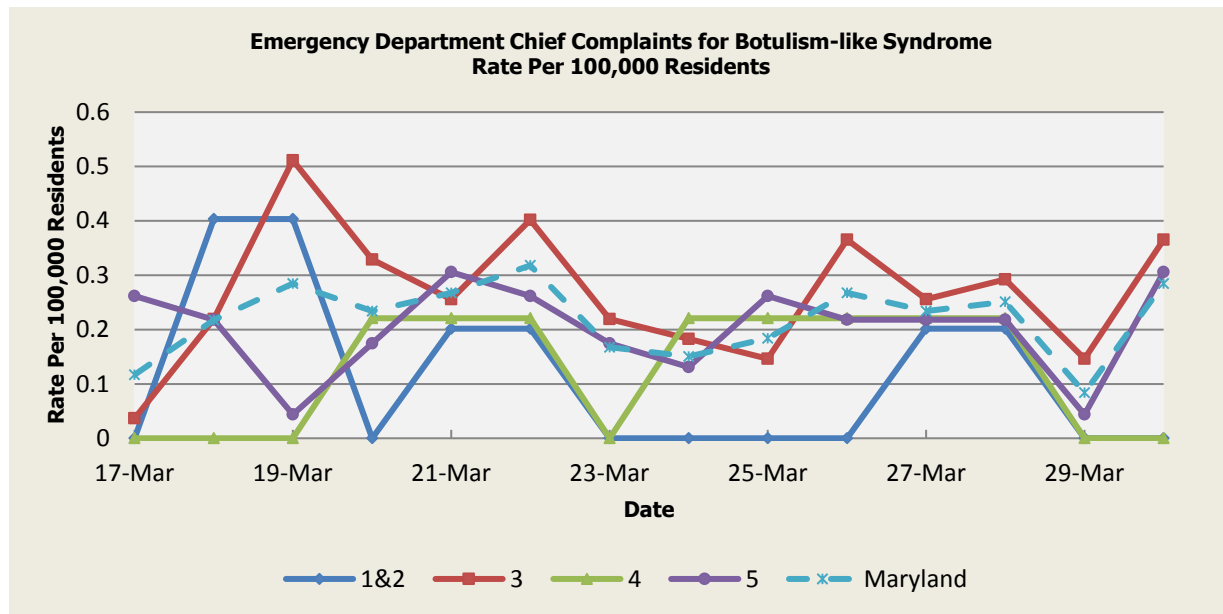
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

* Per 100,000 Residents

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SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



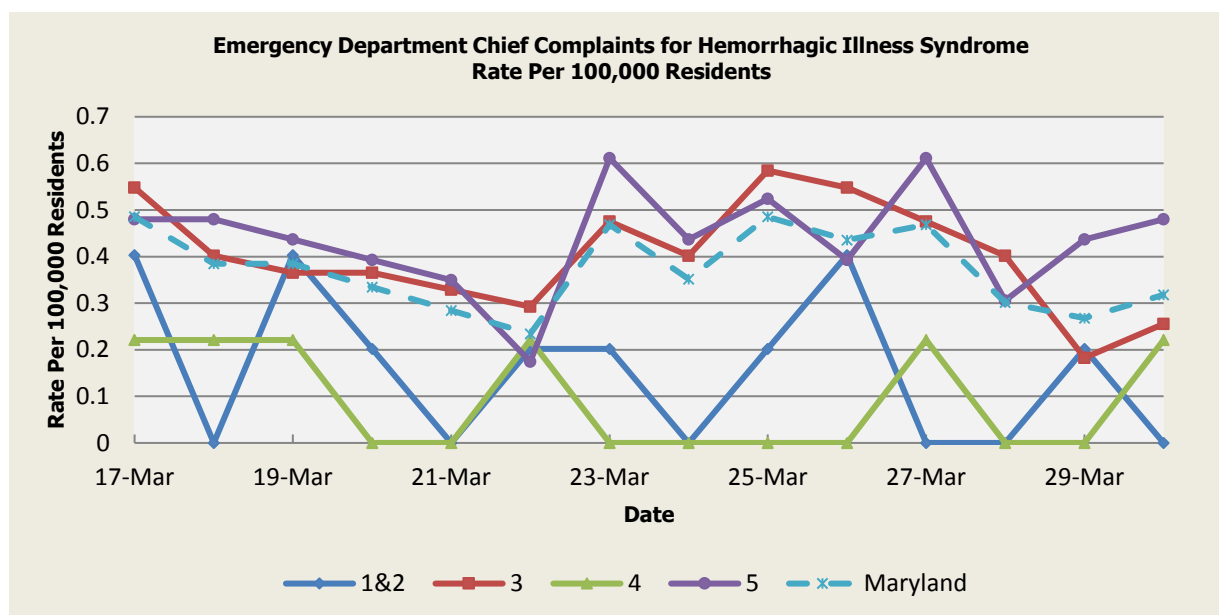
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 3/17 (Region 5), 3/18 (Regions 1&2,5), 3/19 (Regions 1&2,3), 3/20 (Regions 3,4,5), 3/21 (Regions 1&2,3,4,5), 3/22 (Regions 1&2,3,4,5), 3/23 (Region 5), 3/24 (Region 4), 3/25 (Regions 4,5), 3/26 (Regions 3,4,5), 3/27 (Regions 1&2,3,4,5), 3/28 (Regions 1&2,3,4,5), 3/30 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.12	0.06	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

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Hemorrhagic Illness Syndrome



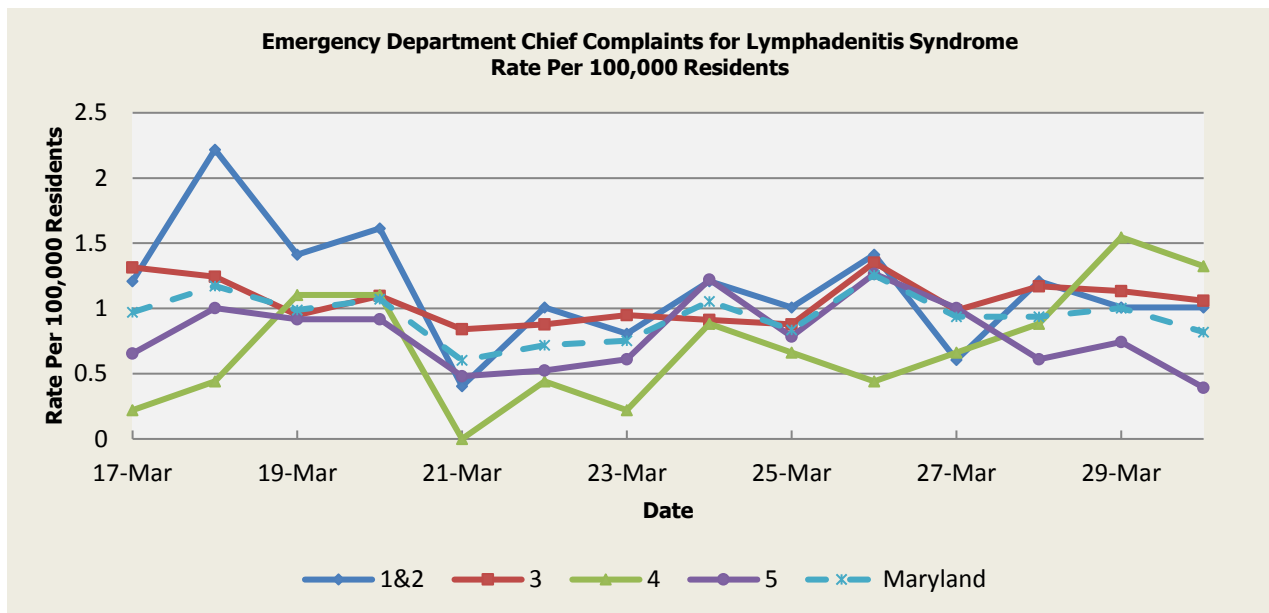
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 3/17 (Regions 1&2,3,4,5), 3/18 (Regions 3,4,5), 3/19 (Regions 1&2,3,4,5), 3/20 (Regions 1&2,3,5), 3/21 (Regions 3,5), 3/22 (Regions 1&2,4), 3/23 (Regions 1&2,3,5), 3/24 (Regions 3,5), 3/25 (Regions 1&2,3,5), 3/26 (Regions 1&2,3,5), 3/27 (Regions 3,4,5), 3/28 (Regions 3,5), 3/29 (Regions 1&2,5), 3/30 (Regions 4,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.09	0.07

* Per 100,000 Residents

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Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 3/17 (Regions 1&2,3), 3/18 (Regions 1&2,3,5), 3/19 (Regions 1&2,3,4,5), 3/20 (Regions 1&2,3,4,5), 3/22 (Regions 1&2), 3/23 (Regions 1&2), 3/24 (Regions 1&2,4,5), 3/25 (Regions 1&2,5), 3/26 (Region 1&2,3,5), 3/27 (Region 5), 3/28 (Regions 1&2,3,4), 3/29 (Regions 1&2,4,5), 3/30 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.36	0.57	0.40	0.37	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

* Per 100,000 Residents

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

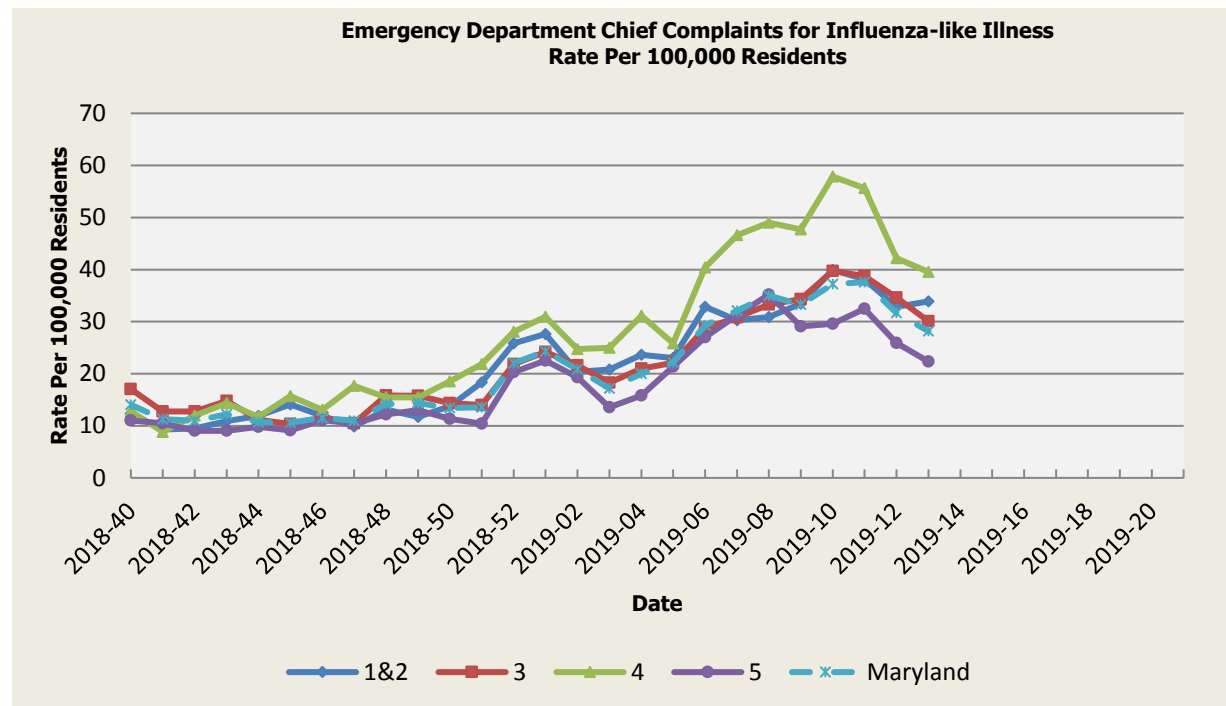
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 13 was: Moderate Intensity and Widespread geographic activity.

Influenza-like Illness

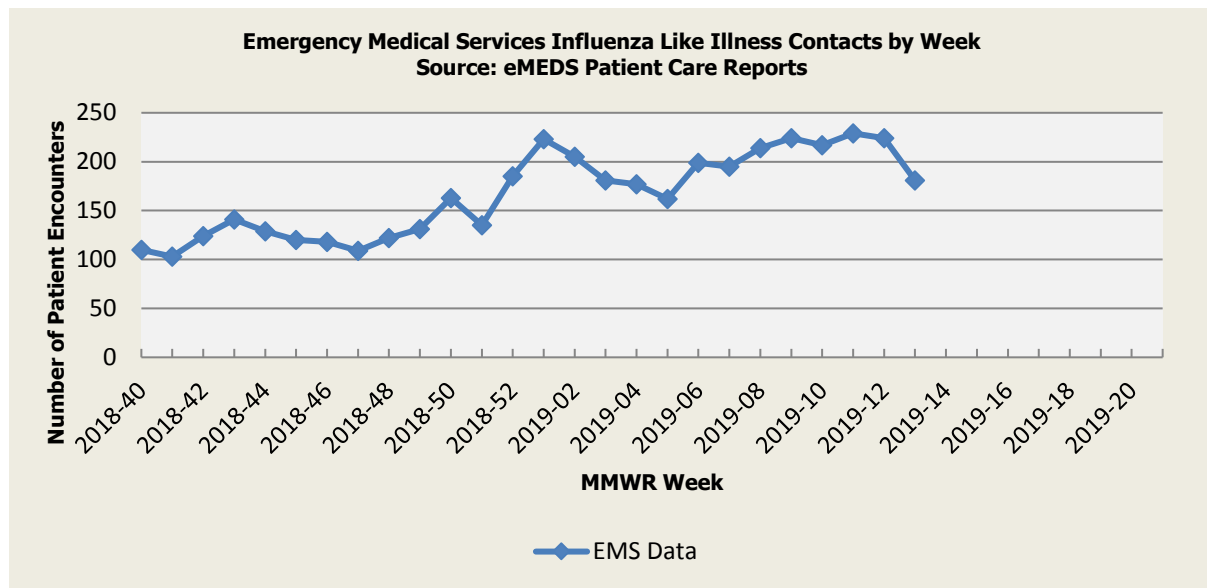


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.18	13.33	12.90	11.29	12.25
Median Rate*	7.66	10.21	9.27	8.69	9.29

* Per 100,000 Residents

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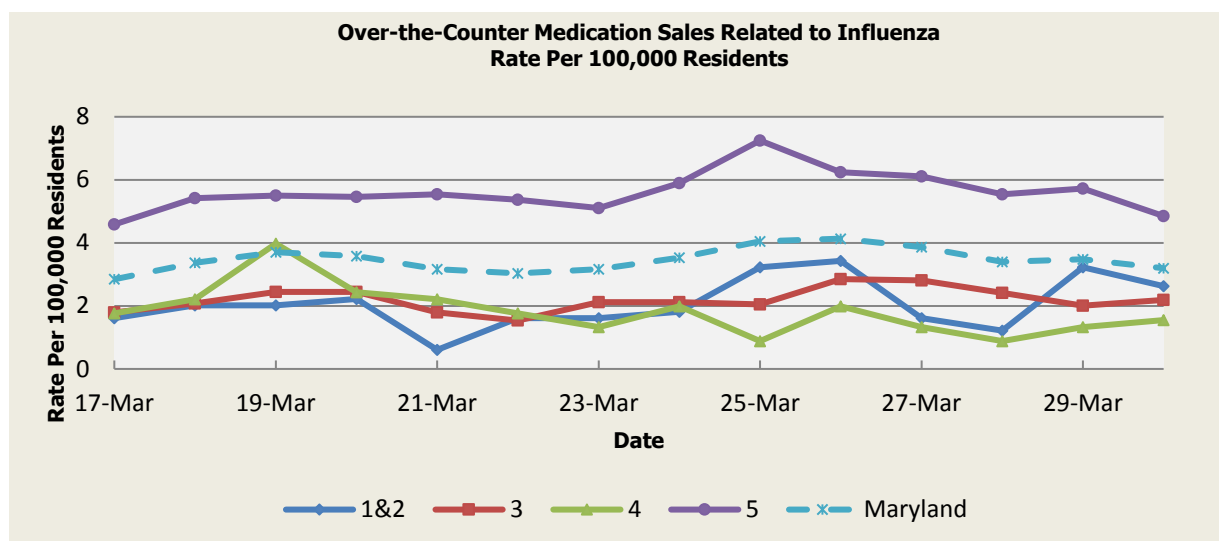
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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Over-the-Counter Influenza-Related Medication Sales



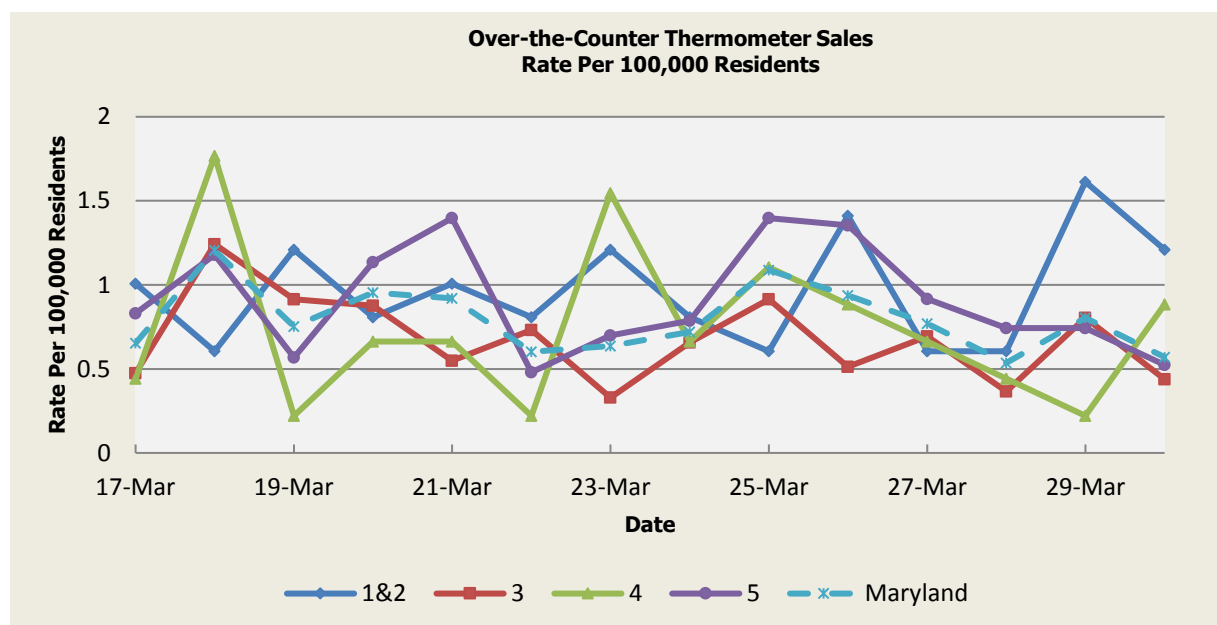
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.60	4.64	2.74	8.07	5.72
Median Rate*	2.82	3.84	2.43	7.38	5.00

* Per 100,000 Residents

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Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.08	2.93	2.32	3.90	3.27
Median Rate*	2.82	2.78	2.21	3.75	3.15

* Per 100,000 Residents

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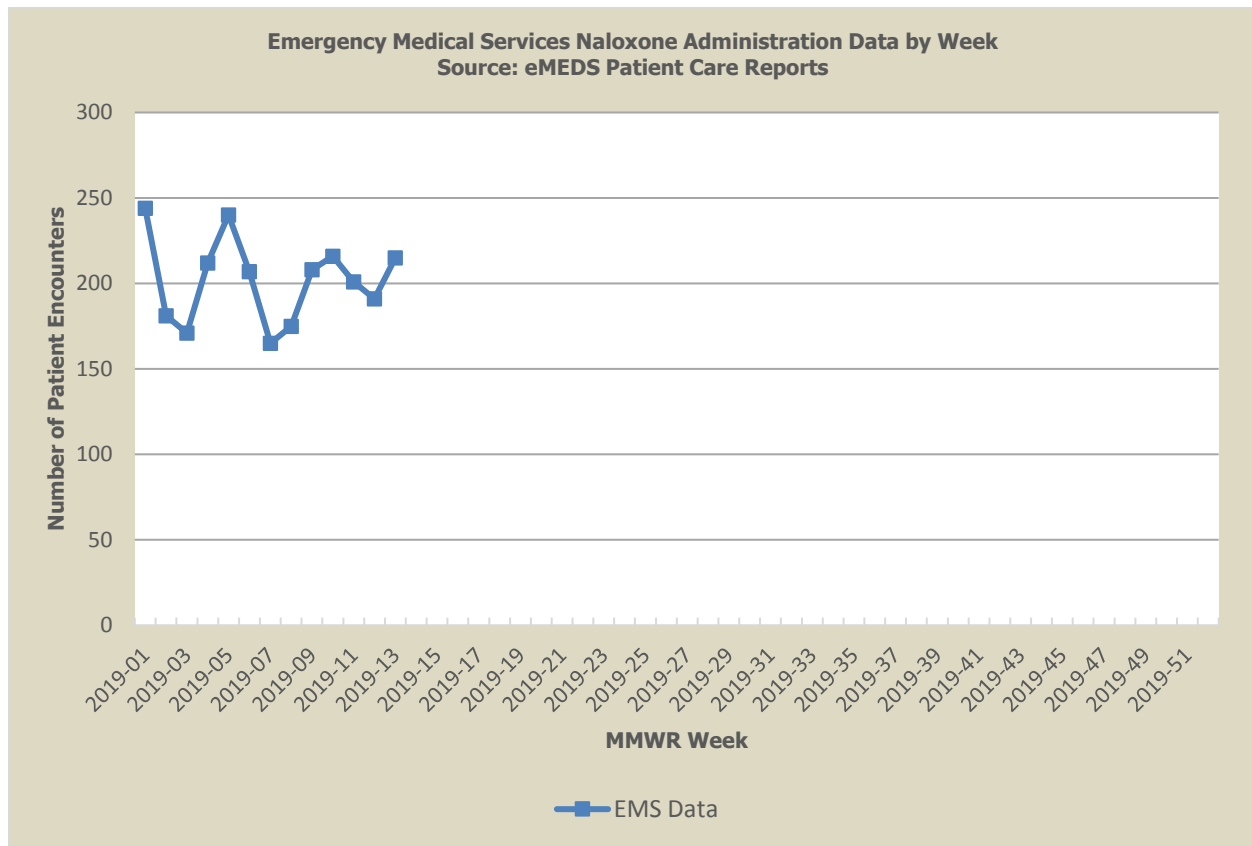
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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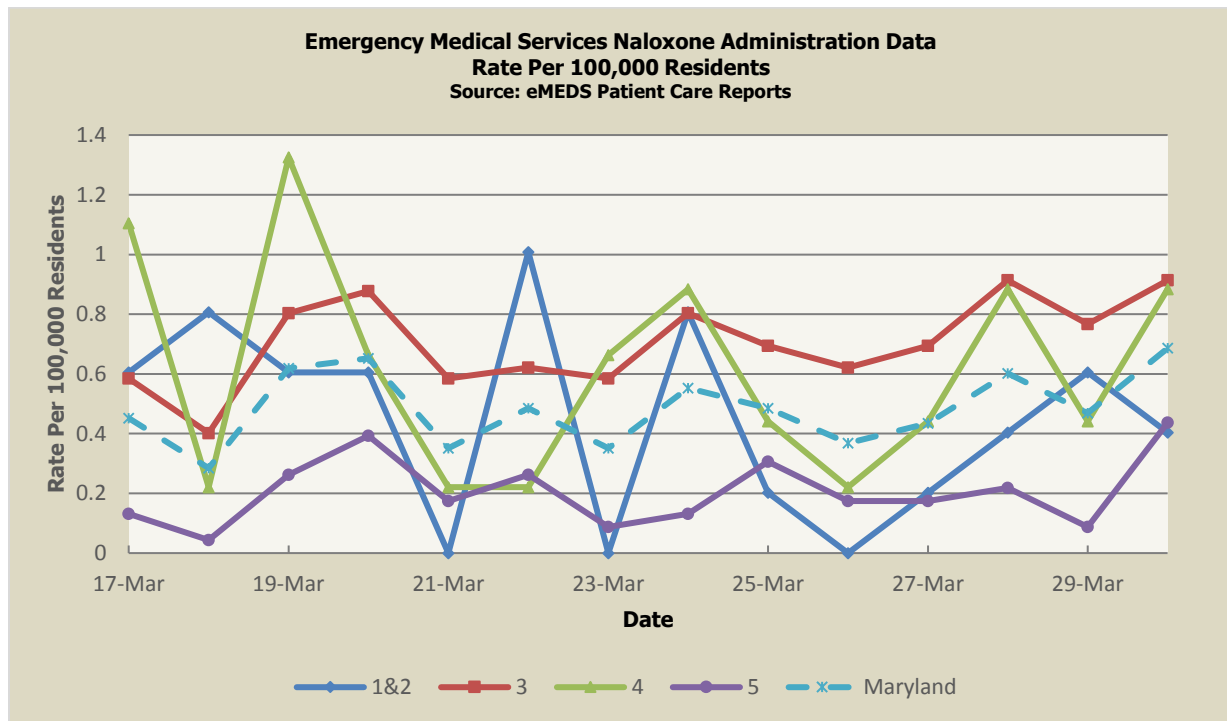
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of April 4, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA (INDIA), 02 Apr 2019, A team of veterinary doctors and experts culled more than 600 ducks and 66 chickens on [31 Mar 2019] following confirmation of bird flu (H5N1) in the city [Cuttack]. An outbreak of bird flu was suspected after death of ducks in the Duck Breeding Centre and Dairy Farm at Khapuria. On 23 Mar 2019, as many as 13 ducks died on the day in the farm. District veterinary office investigated into the incident and sent blood samples to the National Institute of High Security Animal Diseases (NIHSAD) in Bhopal. "The samples tested positive for the H5N1 or avian influenza virus," informed chief district veterinary officer Premananda Rout. "Following the test report, we culled ducks and chickens. Moreover, 3.6 quintal [360 kg] of foodgrains were destroyed as well. Read More: <http://www.promedmail.org/post/6399500>

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

MUMPS (PENNSYLVANIA), 30 Mar 2019, A mumps outbreak that began at Philadelphia's (PA) Temple University in February [2019] has snowballed, with the city's health department now reporting 106 cases associated with the flare-up. University officials say the vast majority of

students involved had been immunized previously with the MMR vaccine, which protects against measles, mumps and rubella. Read More: <http://www.promedmail.org/post/6394589>

E. COLI EHEC (KENTUCKY), 29 Mar 2019, The Mercer County Health Department announced that there is an _E. coli_ O103 outbreak linked to "extensive fast food exposure." At this time, the health agency has not yet announced what fast food restaurants those who were ill ate at. Many of those who are ill are children, but the outbreak does not appear to just be limited to children. The health department has confirmed 19 cases in central Kentucky. This investigation into this outbreak is ongoing. Read More: <http://www.promedmail.org/post/6393053>

INTERNATIONAL DISEASE REPORTS

PERTUSSIS (NEW SOUTH WALES), 03 Apr 2019, The Port Macquarie-Hastings local government area has recorded a staggering 11 cases of whooping cough over the past 4 weeks. That is just under half the 23 cases for the Mid North Coast. The Mid North Coast local health district has issued an urgent warning for all pregnant women and parents to be aware of the symptoms of whooping cough and to ensure they and their children are vaccinated on time. Children with symptoms should see a doctor. If a doctor diagnoses whooping cough in a school-aged child, parents should let their school know and keep their child at home until they have taken 5 days of antimicrobials. Read More: <http://www.promedmail.org/post/6402556>

FOODBORNE ILLNESS (PHILIPPINES), 03 Apr 2019, At least 4 people have died, and 15 others are in intensive care, following a food poisoning scandal at a retirement home in France. A total of 22 residents at the residential care facility in Lhrem, near Toulouse, sat down for dinner last night [Sun 31 Mar 2019] before becoming violently ill. "The residents all had symptoms at around 8:00 p.m., an hour and a half after their meal," deputy mayor Frederic Pasian said, adding that many were "vomiting and displaying other serious symptoms related to their meal." He said that names of the 4 deceased, and all the other victims, were not being released until family members had been informed. Mr Pasian indicated that there were serious fears that others could die. Read More: <http://www.promedmail.org/post/6402555>

CHOLERA (MOZAMBIQUE), 03 Apr 2019, Cholera cases in cyclone-hit Mozambique have risen above 1400, government officials said Tuesday [2 Apr 2019], as hundreds of thousands of vaccine doses arrived in an attempt to limit the rapid spread of the disease. Authorities announced a 2nd death from cholera, which causes acute diarrhea and is spread by contaminated food and water, conditions that some 128 000 displaced cyclone survivors now risk daily while living in temporary, often crowded shelters. Cholera can kill within hours if not treated. Read More: <http://www.promedmail.org/post/6402352>

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN), 02 Apr, 2019, Deadly [Crimean-Congo] hemorrhagic fever (CCHF) has claimed the life of a youngster at Jinnah Postgraduate Medical Centre (JPMC) on [Mon 1 Apr 2019], after which the death toll due to the fever mounted to 3 this year [2019]. Executive Director, JPMC, Dr Seemi Jamali, while talking to PPI [Pakistan Press International], confirmed the death of [a] 19-year-old [patient] from

Congo fever who was brought to the health facility 2 days ago with high grade-fever and bleeding from nose and mouth. Read More: <http://www.promedmail.org/post/6399104>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

